

KYBAL, J.; BREJCHA, V.; HORAK, P.

Relation between contents of alkaloids and pigments in
sclerotia of Claviceps purpurea tul. Cesk. farm. 4 no.4:
190-191 May 55.

1. Z Vyzkumneho ustavu lecivych rostlin, Praha.

(ERGOT ALKALOIDS

relation between contents of alkaloids and
pigments in sclerotia Claviceps purpurea tul.)

(PIGMENTS

in sclerotia Claviceps purpurea tul, relation to
alkaloid contents)

HORAK, P.

Effect of storing ergot in atmosphere of inert gases on
alkaloid contents. Cesk. farm. 4 no.4:191-194 May 55.

1. Z Vyzkumneho ustavu lecivych rostlin v Praze.
(ERGOT ALKALOIDS

eff. of storing ergot in atmosphere of inert gases
on alkaloid contents.)
(GASES

inert gases atmosphere, storing ergot eff. on
alkaloid contents.)

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and
Their Application. Medicinals. Vitamins. Antibiotics. H-17

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44294.

Author : Horak Pavel, Blazek Zdenek.

Inst :
Title : Comparison of Different Methods of Determining the

Content of Ergo Alkaloids.

Orig Pub: Farmacia, 1955, 24, No 4, 100-104.

Abstract: Investigated were the accuracy and reliability of
the following methods: volumetric method, gravimetric
method according to Wessel, colorimetric methods
GF=8, Allport-Jones, Smith and Grove. In addition
the alkaloids were titrated biologically according
to Broon-Clark, and the amount of biologically active
alkaloids was determined polarimetrically. Colori-

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CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Application. Medicinals. Vitamins. Antibiotics.

E-17

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44294.

metric methods were found to be much more accurate than the volumetric and gravimetric; and of the first mentioned the method of Smith is the most convenient since it is the fastest (requiring only 4 hours while the other -- up to 7 hours).

Card : 2/2

FOOTER / LEVEL

APPROVED FOR RELEASE: 09/21/2001, CIA-RDP86-00513R000618120014-8"
Their Application - Medicinals, Vitamins, ...
Antibiotics

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 5572

Author : Horak Pavol

Inst L Not given

Title : Azulenes in Pharmacology and Cosmetics

Orig Pub : Farmacia, 1955, 24, No 4, 116-117

Abstract : Azulenes are obtained from plants (wormwood, Matricaria chamomilla etc.), by isolating therefrom the higher unsaturated hydrocarbons which are purified by chromatography. The azulenes thus obtained form blue or violet crystals. Determination of the content of azulenogenic

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HORAK P.

CZECHOSLOVAKIA/Cultivated Plants. Medicinal Plants. Essential Oil M
Plants; Toxic Plants

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34847

Author : Kybal J., Horak P., Novacek M., Kudrnac S.

Inst : ~

Title : On the Problem of Appraising the Qualities of Wild-Growing
Herbaceous Ergot

Orig Pub : Ceskosl. farmac., 1957, 6, No 5, 265-268

Abstract : The work was undertaken for the purpose of studying the potentials of the ergot *Claviceps purpurea* Tul., developing the species on wild-growing herbaceous plants, and selecting its most active breeds; 32 samples of ergot, gathered from various districts of Czechoslovakia and Moravia from wild-growing plants in the fall of 1954 served as test material. A short geo-botanical description of the samples is given. Described are chemical methods for sclerotic research to ascertain the presence of alkaloids. Determination is made of the gross content of alkaloids, its fluctuations in different

Card : 1/2

HORAK, F.

- 27
- Prague, Collection of Czechoslovak Chemical Communications, Vol. 27, pp. 1021-1024, (continued)
- Faculty for Analytical Chemistry at Charles University, Prague; pp. 1025-1030.
37. "Spectrophotometric Determination of Manganese Content with Phenylbenzene," S. BESSEN and J. ZEGLA of the Institute for Analytical Chemistry at Chemical University, Prague; pp. 1031-1033.
38. "Organic Quantitative Analysis, Part XXXI. An Auto Determination of Carbon in Organic Substances by Means of Measuring an Electric Conductivity and by Using Carbon as a Conductivity Catalyst," K. V. KERSEY, J. L. HARRIS and R. A. COOPER of the Research Institute for Organic Materials, Philadelphia; pp. 1033-1037.
39. "Methods of Separating Natural Substances, Part V. The Determination of Ascorbic Acid in Extracts from Pulpier Shells," P. HORAK, J. KUDLA, M. V. KUDLA and I. CERNÝ, Research Institute for Natural Products, Prague; pp. 1037-1042.
40. "Spectrophotometric Determination of Hesperoflavin with the Modified Cromat and Butcher Method," J. PETERLIK of the Chromat-Fraction Station at the (National) Faculty of Drugs; pp. 1043-1045.
41. "Organ-Fluid Chromatography. The Relation between the Desired Elution Time and the Selective Retention of Organic Compounds," I. M. VODČÍK, Chair of Organic Technology at the Chemical-Technological Institute, Prague; pp. 1045-1048.
42. "Photodissociation of an Unidentified Component of Wood Aromes, Part II. Determination of the Ratio of the Isomers of Cumopiperitone, Part I and III, Polycyclic Phenyl-Chromophore Derivatives," M. KUDLA, Institute for Wood, Biogas and Occupational Diseases, Prague; pp. 1049-1053.
43. "Triterpenic Acid Compounds and Their Analogs, Part XVII. Reaction of Ursolic and of Taxane Analogs with Zincocene Carbonyl," M. KUDLA and J. ŠTĚPÁN, Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czechoslovakia, Prague; pp. 1055-1059.
44. "Synthesis of 3-Denoxysqualan," J. ŠTĚPÁN, Department of Organic Synthesis at the Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague; pp. 1055-1059.
45. "Plant Substances, Part XIII. Tannatin, the Bitter Principle of Tannatina vulgaris L., N. SLEČKA, Institute of Organic Chemistry and Technology, Prague, Academy of Sciences, Prague; pp. 1060-1063.

CZECHOSLOVAKIA

HORAK, P., Magister of Pharmacy, Candidate of Sciences, Research Institute for Natural Medicines (Vyzkumny ustav prirodnych leciv), Prague, and ZYKA, J., Chair of Analytic Chemistry (Katedra analytische chemie), Charles University, Prague.

"Indirect Photometric Determination of Alkaloids after Chromatographic Separation. I. Precipitation of Alkaloids by Means of Thallium Complexes"

Prague, Ceskoslovenska Farmacie, Vol XII, No 6, July 1963, pp 286-289.

Abstract [Authors' English summary, modified]: A precipitation reagent of optimal composition can be prepared from one part of 0.1 N thallium sulfate and three parts of 0.1 N iodine in a 0.15 M potassium iodine solution. It precipitates alkaloids in a neutral or acid medium. Precipitates of the tropane alkaloids, which can be prepared in a crystalline form, are relatively water-soluble, and the sensitivity of the reagent is in conformity with the sensitivity of other alkaloids precipitation reagents. In view of the properties of alkaloid precipitates and the sensitive color reaction of thallium it is possible to use this precipitation reagent for an indirect determination of small quantities of alkaloids. Seven references, including 2 Russian.

CZECHOSLOVAKIA

HORÁK, P., Magister of Pharmacy, Candidate of Sciences, Research Institute for Natural Medicines (Vyzkumný ústav přírodních léciv), Prague, and ZYKA, J., Chair of Analytic Chemistry (Katedra analytické chemie), Charles University, Prague.

"Indirect Photometric Determination of Alkaloids After Chromatographic Separation. II. Photometric Determination of Thallium by Means of Crystal Violet"

Prague, Ceskoslovenska Farmacie, Vol XII, No 6, July 1963, pp 289-293.

Abstract [Authors' English summary, modified]: Crystal violet and thallium form a precipitate, the bromothallate of crystal violet, which can be extracted into a nonpolar organic solvent. This precipitate was chosen among 23 dyestuffs of the triphenylmethane group because of its high staining intensity and considerable stability in neutral and acid solutions. An experimental method is described in which crystal violet is applied in the microdetermination of thallium in precipitates in the form of complexes with alkaloid bases. Thirty-seven references, including 5 Czech, 6 Russian, and 1 Polish.

1/1

HORAK, P., Research Institute for Natural Drugs (Vyskumný ustav prirodních lecit), Prague, and ZYKA, J., Chair of Analytic Chemistry (Katedra analytické chemie), Charles University, Prague.

"Indirect Photometric Determination After Chromatographic Separation. III. Detection and Extraction of Alkaloids."

Prague, Ceskoslovenska Farmacie, Vol XII, No 7, September 63,
pp 359-362.

Abstract [Authors' English summary, modified]: A complex of thallium salt with iodine and iodide (thallium concentration being 0.005 N) was used for detecting alkaloids on paper chromatograms. Results showed a low variation and the alkaloid precipitation was quantitative. The technique of the method is described. The method may be used for determining 10 to 60 μ g of tropane alkaloids on paper (photometric determination of the thallium components by means of crystal violet after oxidation with bromide). Three references, including 2 Czech.

1/1

HORAK, P.; ZYKA, J.: Research Institute for Botanical Drugs, Chair APPROVED FOR RELEASE: 09/21/2001 CIA-RDP86-00513R000618120014-8"
of Analytic Chemistry, Charles University, Vyskumný ustav prirodních lecit, Katedra Analytické chemie Karlovy University, Prague.

"Indirect Photometric Determination of Alkaloids after Chromatographic Separation. IV. The Chromatographic Separation of Tropane Alkaloids."

Prague, Ceskoslovenska Farmacie, Vol 12, No 8, 1963, pp 394-398

Abstract: Octanol was used as stationary and ammonia as mobile phase. 1-2% admixture may be determined, there is no loss of alkaloids. Hyoscyamine cannot be separated from atropine. Detail instructions for the analysis are given, using amounts of 10-50 micrograms of the analyzed substance. The authors used the method for a successful separation of 14 opium alkaloids.
3 Figures, 16 Western, 2 Czech references.

1/1

HOLUB, J., Dr.; HORAK, R., Dr.

Two cases of pregnancy in rudimentary part of the uterus. Cesk.
gyn. 19 no.5:347-351 Oct 54.

1. Z gyn. odd. OUNZ Teplice, Lazne, Prednosta prim. Dr. Holub.
(PREGNANCY, ECTOPIC
rudimentum of uterus)

HORAK, R.

Horak R.; Barton, K.; Vavra, B. "Lack of Planning in Coal Mining." p. 509 (Za
Socialistickou Vedu A Techniku, Vol. 3, no. 12, Dec. 1953, Praha)

SO: Monthly List of East European Accessions, Vol. 3, No. 3
Library of Congress, March 1954
~~1953~~, Uncl.

HORAK, R.; MRNKA, Z.; FRCKOP, S.

Strip mining in the ZMS ore strip mine in Ejpovice.

p. 298 (Rudy) Vol. 5, no. 9, Sept. 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

HORAK, R.

HORAK, R. inzh. MRNKA, Z. inzh.; PROKOP, S., inzh.; NOVIKOV, D.D.
[translator], gornyy inzh.

Mining iron ores in Mjpowice. Gor.zhur. no.10:34-39 O '57.
(MIRA 10:12)
(Czechoslovakia--Iron mines and mining)

HORAK, S.; LADA, M.

Contribution to the elimination of vibrations by means of elastic seating of machines. n. 157

Ceskoslovenska vedecka technika spolecnost pro zdavotni techniku a vzduchotechniku, Praha, Czechoslovakia, Vol. 4, 1959.

Montly List of East European Accessions, (EEAI) LC, Vol. 8, No. 7, July 1959.
Uncl.

HORAK, Stanislav

"Short and concise book on technical drawing" by Dittmar
Vollmer. Reviewed by Stanislav Horak. Stroj vyr 12 no.10:
781 0 '64.

HORAK, Stanislav

Personality of the foreman in the machinery industry. Stroj
vyr 10 no.2:57-58 '62.

HORAK, V.; PARKANYI, C.

"Organic chemistry of bivalent sulfur" by E.Emmet Reid.
Reviewed by V.Horak, C.Parkanyi. Chem listy 58 no.11;1356-
1357 N '64.

Z/031/62/010/012/001/002
D006/D102

AUTHORS: Horák, Václav, and Kyzlink, Vladimír

TITLE: Permanent magnets produced by pressing from a mixture of metal powder with synthetic resin

PERIODICAL: Strojírenská výroba, no. 12, 1962, 603-605

TEXT: Miniature and/or intricately shaped permanent magnets of Ti-modified AlNi or AlNiCo alloy types are difficult to cast and their machining is expensive. Magnets produced by powder metallurgy are brittle and also difficult to machine. Bonded permanent magnets from grit of heat-treated Fe-Co-Ni-Al-Ti-Cu alloy, using epoxy resin as binding agent, provide a solution to these problems at a comparatively small sacrifice of magnetic properties. For highest specific gravity (up to 5.98 gr/cm³) and, consequently, best magnetic properties, a blend of fine- and coarse-grained grit (0-0.4 mm with 0.61-1.5 mm, or 0.41-0.6 mm with 1.51-3.0 mm grain size) in a 22:78% mixing proportion is recommended. Acetone solution of 1002-B epoxy resin type proved the best binding agent for this purpose, the only

Card 1/2

Permanent magnets produced by ...

Z/031/62/010/012/001/002
D006/D102

disadvantage being its long curing time ranging from 48 hours at 110°C to 0.83 hour at 190°C. Optimal wettability was obtained when using 1cm³ of epoxy solution for 15 gr of grit. Pressing force of 41 tons was used and curing was made at a maximum temperature of 200°C. Products featured high dimensional accuracy requiring only slight grinding of edges with emery cloth. There are 3 figures and 5 tables.

ASSOCIATION: Tesla, Liberec

Card 2/2

HORAK, V.

Direct spinning of cotton yarn from sliver. p. 132.

TEXTIL. (Ministerstvo lehkeho prumyslu) Praha, Czechoslovakia. Vol. 14,
no. 4, April 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,
November 1959.

Uncl.

Horař K, V.

Gas Carburing in Muffles. V. Horařík and M. Štoup.
(Slovenský, 1953, 8, (12), 614-620). (In Czech). Various
methods of case-hardening, the disadvantages of liquid and
permeable media, the principles of gas carburing, and the
chemical processes involved are discussed. A new method
called "GRCUP", using a propane-air-butanane mixture in
reversibly held steel muffles, is described in detail. Good
results are obtained with [redacted].

HORAK, V.; CIR'LKA, J.

Manganese dressing by physical and chemical methods. p. 98. (Stud, Vol. 5, No. 3, Mar 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

HORAK, V.

The proper vibration of a rod lying on an elastic base and subject to a static axial force. In German. p. 187. (ACTA TECHNICA, Vol. 1, No. 3, 1956, Praha, Czechoslovakia)

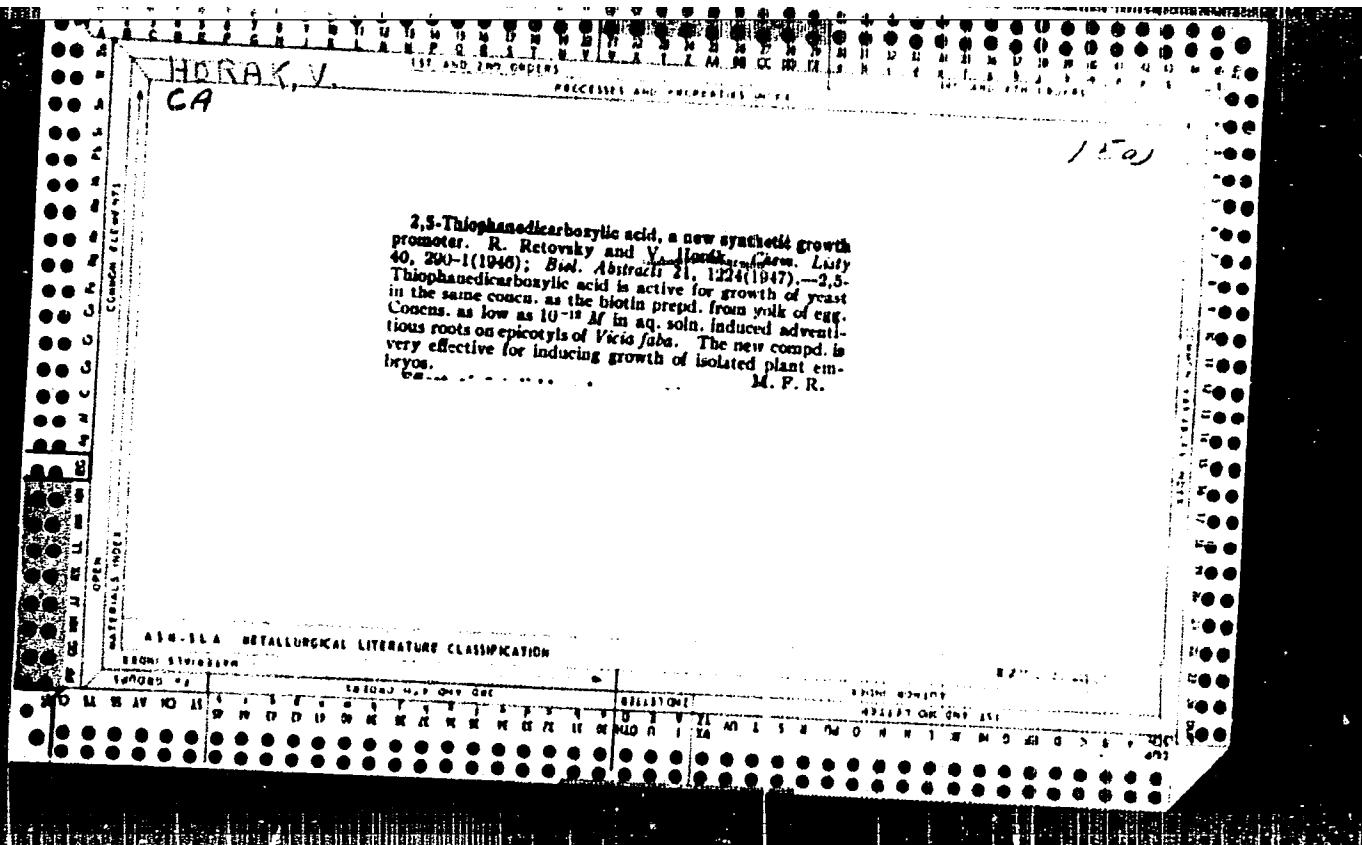
SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Unc1.

HORAK, V.

Natural oscillation of flat bar systems with rigid space joints subjected to static axial forces. In German

p. 182 (Acta Technica) Vol. 2, no. 2, 1957 Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EAI) LC, VOL. 7, NO. 1, Jan. 1958



HORAK, V.

A new possibility of secondary amine degradation
Horka, *Chem. Listy* 43, 300-1 (1949). A secondary
amine is transformed by α -C₆H₅(CO)₂O to a dialkyl mono
amide of phthalic acid. This gives with SOCl₂ a chloride
which affords on heating an alkyl phthalimide and an alkyl
chloride. To α -C₆H₅(CO)₂O in boiling benzene is added an
equiv. amt. of a secondary amine in C₆H₆, the dialkyl amide
of phthalic acid isolated and heated with 1.1-1.5 moles
-SOCl on a steam bath, and the crude chloride distilled under
vacuum, or reduced pressure to give the alkyl phthalimide and
alkyl chloride. The cleavage was carried out with NH₂H, or
NHMe, and PhNHMe. A Me group was split off in the
case of PhNHMe. The alkyl chlorides were not isolated,
only the intermediate N-methyl-, N-ethyl-, and N-phenyl-
phthalimides were characterized. Yields are not given.
M. Hrdlicky

CA HORAK, V.

Some derivatives of 4,5-thiophanedicarboxylic acid.
V. Horak (Charles Univ., Prague). *Chem. Listy* 44, 34-5

(1950). - 2,5-Thiophanedicarboxylic acid (I) prep'd. from $\text{mno}(\text{CH}_3\text{CH}_2\text{CO}_2\text{H})_2$ was refluxed with 10% excess AcCl in CaH_2 ; crystals of *cis*-2,5-thiophanedicarboxylic anhydride (III) which sepd. were recrystd. from CaH_2 with petro-ether and sublimed at 20 mm. at 150-70°(bath temp.) giving 82.3% III, m. 149-50°. I reduced with PhNH_2 in CaH_2 gave 50.5% mononitro of I, recrystd. from soda soln. in crystals, m. 140°. I was digested with *aq.* NH_3 on the steam bath, evapd., the residue heated slowly to 280°, held 10 min. at 280°, and the melt poured into water to yield 23.8% nitro (III), m. 156° after several recrysins from water and sublimation *in vacuo*. III in an EtOH soln. of NaOEt reduced with PhCH_2Cl gave 39.4% *N*-benzylamide, m. 114° (from dil. EtOH and Me_2CO). The Hg^+ salt of I was prpd. by HgNO_3 from I in water. M. Hrdlicky

HORAK, VACLAV

Methodika organickych reakci. Nyd. 1. Praha, Statni pedagogicks nakl., 1953.
253 p. (Ucебни тексты высоких школ) Methodics of organic reactions

East European Vol. 3, No. 3
SO: Monthly List of Russian Accessions, Library of Congress, March 1953, Uncl. 4

HORAK, V.; NOVOTNY, L.

Phtalic anhydride splitting of secondary amines [in German with summary in Russian]. Sbor.Chekh.khim.rab. 18 no.1:80-85 F '53. (MLRA 7:6)

1. Institut organicheskoy khimii fakul'teta yestestvennykh nauk Karlova universiteta. (Amines) (Phtalic anhydride)

"APPROVED FOR RELEASE: 09/21/2001

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HORAK, V.
PACAK, J.

"Thiophane Derivatives. II. The Synthesis and Spontaneous Decomposition
of 2, 5-Bis-Bromacetylthiophane" P. 384
(COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SBORNÍK ČESkoslovenských
Khimických Rabot Vol. 18, No. 3, June, 1953 - Praha, Czech.)

SO: Monthly List of East European Accessions, (EEL), LC, Vol. 4, No. 4,
April 1955, Uncl.

HORAK, VACKY

5

Decomposition of chloromethyl benzyl sulfide in strong
oxidizing acids. Sulfur analogy of the Baeyer-Villiger reaction.
Václav Horák and Eugenio Šimrova. České化學
杂志, 1954, 28, 111-115.

Abstract. Benzyl chloromethyl sulfide was decomposed by concentrated sulfuric acid at 100°C. The product was isolated and identified as 2-chloro-3-methyl-2-butene. The same reaction was carried out with concentrated nitric acid at 100°C. The product was isolated and identified as 2-chloro-3-methyl-2-butene. The same reaction was carried out with concentrated perchloric acid at 100°C. The product was isolated and identified as 2-chloro-3-methyl-2-butene. Reducing 14 g. IV 20 min with 10 g. Pt black in dilute H₂SO₄ gave III (3.6 g. 40%). Reducing 14 g. IV 20 min with 2 g. HgO in 10 ml. AcOH gave V after oxidation. Reducing 14 g. I 90 min with 10 g. Pt black in 10 ml. AcOH gave III and IV. Reducing 14 g. I 90 min with 10 g. Pt black in 10 ml. AcOH gave IV (4.0 g. 55%). In German
M. Šimrova

NKT

HORAK, V.; GEROVVA, E.

Breakdown of chloromethylbenzyl sulfide in a strongly acid anhydrous medium; sulfur analogy of the Sommelet reaction [in German with summary in Russian]. Sbor.Chekh.khim.rab. 19 no.1:85-90 F '54. (MLRA 7:6)

1. Institut organicheskoy khimii Karlova Universiteta, Fraga.
(Sulfides) (Sommelet reaction)

HORAK, V.

"S-Alkylisothiuronium Hydrogen Carbonates. I. Modified Preparation
of Mercaptans of S-Alkylisothiuronium Salts", P. 414, (CHEMISCHE
LISTY, Vol. 48, No. 3, Mar. 1954, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4,
No. 1, Jan. 1955, Uncl.

HORAK, V.

"S-Alkylisothiuronium Hydrogen Carbonates. II. Use for the Identification
of Organic Acids", P. 469, (CHEMICKE LISTY, Vol. 48, No. 3, Mar. 1954,
Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No.1
Jan. 1955, Uncl.

HORAK

CZE CH

1. Modified Prod has undergone extensive A. Drying. From 210° F to 40° C
The original design of the equipment of the
process is described in detail. The new
method of drying organic materials in an
external jacket is heated by the vapors of the
solvent.

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HORAK, V.

~~High performance chromatography of lanthanide lanthanum salts~~
~~Kruszyna and Pacholska~~
~~Journal of Chromatography~~
~~Volume 100 Number 1 1973~~
~~pp 101-106~~

APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8"

HORAK, VACLAV

Preparation and properties of 3-aryl derivatives of 4-hydroxyxanthin. A new synthesis of flavones. Jozef Lerec and Václav Horák (Královské Vinohrady, Praha). Čas. Léky 49, 1644-7 (1984). Collection Czechoslovak Chem. Chem.

(1) mans. 20, 371-2 (1955) [in German] -- *t*-Butylxanthine (I) and 4-*t*-butylxanthin (II) undergo the Fries rearrangement on heating with AlCl₃ to give 3-Benzoyl- (III) and 3-(*p*-hydroxybenzoyl)-4-hydroxyxanthin (IV). Heating 1 mol. C₆H₅N, which is the procedure for rearranging the aliphatic acyl esters of 4-hydroxycoumarin, splits off the Br group. Alk. hydrolysis of III yielded PhAc. Heating III with HCl in MeOH gave flavone (V); an analogous reaction with IV yielded 4'-hydroxyflavone (VI). Heating 10 g. I. in 100 ml. 7% with 30 g. powd. AlCl₃ 1 hr. at 140-150°, decomprg. the mixt. with 250 g. ice and 100 ml. HCl, filtering off the ppt., treating it 1 hr. with 60 ml. 5% NaHCO₃, filtering with 4 g. C, acidifying the filtrate with HCl to Congo red, filtering off the ppt., and crystg. it from 200 ml. EtOH yielded 6.5 g. white needles of III, m. 143-6°. Heating 2 g. I. with 3.4. C₆H₅N.HCl in 30 ml. PhNO₂ 1 hr. at 100°, raising the temp. finally to 200°, filtering off the C₆H₅N.HCl which deposited on cooling, distg. off the PhNO₂ at 14 mm., dissolving the residue in Et₂O, shaking the soln. with satd. KHC₈O₄, separating the aq. soln. with HCl gave 3-Hydroxyxanthin (VII). Adding 10 ml. PhNH₂ to the PhNO₂ distillate, allowing to stand overnight, distg. at 15 mm., and the anhydrtg. the residue gave 20 mg. PhNH₂Br, m. 161°. Refluxing 1 g. III with 30 ml. 5% NaOH 3 hrs. gave PhAc and a 11.0% yield.

CO₂H. Refluxing 5 g. III 4 hrs. with 100 ml. EtOH and 160 ml. concd. HCl, adding 50 ml. HCl, refluxing the mass 20 hrs., boiling with 0.2 g. C, filtering, and dilg. the hot filtrate with 300 ml. boiling H₂O gave 3 g. VII, m. 96-7°, also prepd. in 62% yield by refluxing 19 min. 0.5 g. α -HOCH₂Ac-COCH₂Ac with 10 ml. EtOH and 15 ml. concd. HCl. Treating 8 g. VII in 40 ml. dry ice-cooled C₂H₅N with a drop of C₂H₅N with 1 g. ρ -MeOC₆H₄COCl, stirring the react. 1 min., allowing it to stand 10 min., dig with 50 ml. H₂O, and acidifying w/ 10% NaOH, cooling to -10°, and giving a ppt. which, washed with cold K₂CO₃, was recrystd. from 25 ml. EtOH, yielded 4.4 g. IV, m. 196-7°. Treatment of IV with AlCl₃ in the way just described gave 3.5 g. crystals, from EtOH, 37% IV, m. 260-2. Recrystd. with FeCl₃. Refluxing 2.2 g. IV in 70 ml. chloroform with 30 ml. concd. HCl 5 hrs., adding 30 ml. HCl, refluxing 30 hrs. more, distg. off the solvents in vacuo, dilg. the residue with 50 ml. H₂O, washing the ppt. with K₂CO₃ and H₂O, dissolving it in 30 ml. AcOH, boiling, filtering with C, and crystg. the deposited crystals from EtOH gave 1.1 g. VI, m. 266-6°. At dcrv. (from VI, Ac₂O, and ρ -MeC₆H₄SO₃H), m. 156-7°.

L.C. Hudlicky

HORAK, V.

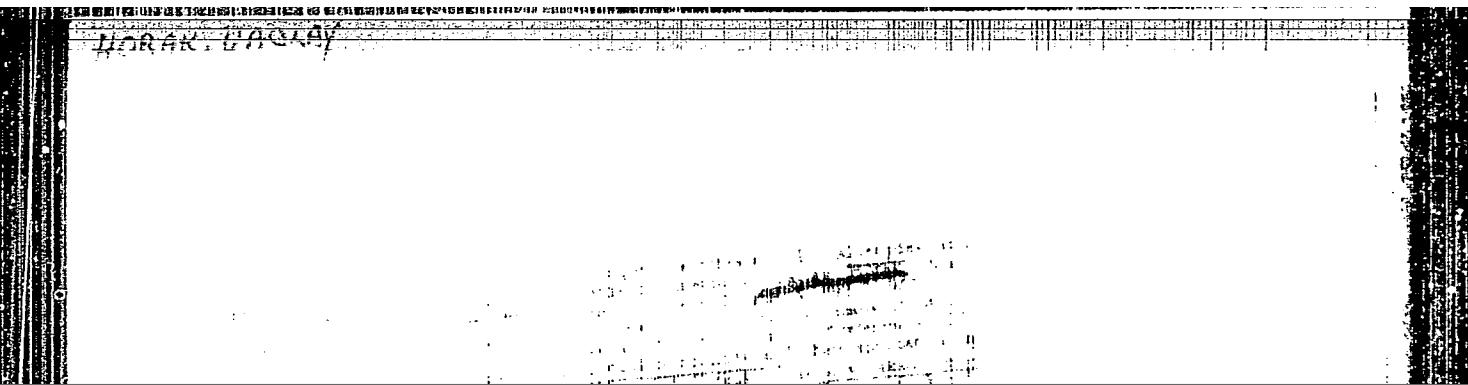
Progress in organic synthesis. I.

p. 411 (Chemie, Vol. 9, no. 3, June 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

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VACUUM WORK

Discr: 4E2c(j)

5. may

Sulfolanes. I. Halogenated derivatives of sulfolane. Milos Procházka and Václav Horák (Karlov University, Prague). *Chem. listy* 52, 1768-70 (1958); cf. *C.A.* 53, 31839. - 3-Sulfolene (I) and Br gave *trans*-3-hydroxy-4-bromosulfolane (II). Chlorination of I yielded according to the conditions *trans*-3,4-dichlorosulfolane (III) or *trans*-3-hydroxy-4-chlorosulfolane (IV) which was transformed to III by PCl_5 .

4-Hydroxy-2-sulfolene (V) and also IV gave 4-chloro-2-sulfolene (VI), by the action of SOCl_2 at higher temp., whereas V and SOCl_2 in the cold yielded bis(4-chloro-3-sulfolanyl)sulfide (VII). *cis*-3,4-Dihydrosulfolane (X) and SOCl_2 gave cyclic 4,4-sulfolanylene sulfite (X). Treatment of V with HBr gave 4-bromo-2-sulfolene (XI). Adding HOBr prep'd. from 80 g. Br and 138 g. Ag_2CO_3 in 400 ml. H_2O to 82.7 g. I in 1 l. H_2O , covering the mixt. with a layer of paraffin oil, allowing to stand 2 days at room temp., and recrys'tg. the sept'l. crystals from EtOH gave 11% II, m. 191-2°, and Br gave a mixt. of 33% II and 63% 3,4-dibromosulfolane, m. 144°. Passing Cl into 11.8 g. I and 10 g. BaCO_3 in 200 ml. H_2O 12 hrs. at 15° and sepg. the product from BaCO_3 by EtOH extn. yielded 76-80% IV, m. 164-5° (EtOH). The same compd. accompanied by 5% III, m. 130-30.5° (CHCl_3 - CCl_4), was prep'd. in a 73% yield by treating I with Cl in the absence of BaCO_3 . Passing Cl into 20 g. I in 100 ml. cooled. HCl 12 hrs. at room temp., filtering off the cryst. product,

washing it with H_2O , and extn. with CHCl_3 at 10° gave 74% III. Undissolved remained 4% II. III was also prep'd. by treatment of 118 g. I in 700 ml. C_6H_6 in the presence of 2 g. iodine with 160 ml. SOCl_2 5 hrs. at 60° (yield 73-80%), or by refluxing 1.71 g. IV with 4.16 g. PCl_5 in CHCl_3 , cragg. the CHCl_3 and POCl_3 in vacuo, and decomppg. the mixt. with 20 g. ice (yield 70.4%), or by refluxing IV with excess SOCl_2 8 hrs. (yield 5.3%). Adding 6.8 g. SOCl_2 to 2.55 g. V, refluxing the mixt. 16 min., decomppg. with ice, triturating the sept'd. oil with H_2O , dissolving the oil in AcOEt, filterng with activated C, and evapg. in vacuo gave 51% VI, m. 82.5° (AcOEt-petr. ether). Refluxing 1.71 g. IV in 5 ml. CHCl_3 with 5.95 g. SOCl_2 in 8.98 g. $\text{C}_6\text{H}_5\text{N}$ and 10 ml. CHCl_3 10 min., decomppg. the mixt. with ice, filtering the CHCl_3 soln. through Al_2O_3 , and evapg. in vacuo gave 53% VI. Adding 6 ml. SOCl_2 in 10 ml. $\text{C}_6\text{H}_5\text{N}$ to 8.13 g. IV in 20 ml. $\text{C}_6\text{H}_5\text{N}$ with cooling below 0°, stirring the mixt. 10 min. without cooling, treating it with ice and 15 ml. HCl , filtering off the product, washing it with H_2O and AcOEt, boiling with EtOH, and recrys'tg. from EtOH-Me₂CO gave 19% VII, m. 188-8.5°. Refluxing 3.48 g. IX with 10 ml. SOCl_2 1 hr., decomppg. the mixt. with ice, washing the product with H_2O and EtOH, and recrys'tg. from Me₂CO yielded 65% X, m. 129-30°. The same compd. was prep'd. similarly in the presence of $\text{C}_6\text{H}_5\text{N}$ in 68% yield. *trans*-IX gave ester chloride, easily hydrolyzed. Satg. 4.46 g. V 2 hrs. at 80° with HBr yielded 8.1% XI, m. 63-4° (EtOH- CCl_4). M. Hustíček

HORAK, V.

02/A-52 (82)-10-17/59

AUTHORS: Procházká, L. and Horák, V.

TITLE: Sulfoxanes. II. [Sulfoxane-II] Hydroxy Derivatives of Sulphoanes. II. [Sulfoxane-II] Hydroxy Sulfoxides

PERIODICAL: Chemický Listy, 1959, Vol. 52 (82), Nr. 10, pp. 1941 - 1945
(Czechoslovakia)

ABSTRACT: The synthesis of these diols was investigated by the catalytic hydroxylation of the unsaturated derivative Diol I.



Diol III: $\begin{array}{c} \text{Me} \\ | \\ \text{C}_6\text{H}_9\text{CH}_2\text{CH}_2\text{SO}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OH} \\ | \\ \text{Me} \end{array}$

III: $\begin{array}{c} \text{X}^1 = \text{X}^2 = \text{OH} \text{ (in the cis position)} \\ \text{X}^1 = \text{OH}, \text{X}^2 = \text{Cl} \end{array}$

IV: $\begin{array}{c} \text{X}^1 = \text{OH} \text{ (in the trans position)} \\ \text{X}^1 = \text{Cl} \end{array}$

was prepared by hydroxylating the sulpholane I with:

hydrogen peroxide. The reaction temperature was kept in the limits of 0 - 20°C because higher reaction temperatures lead to the separation of solid sulphide and to an increase in the concentration of sulphuric acid. The diol III was prepared by the hydrolysis of 3-oxo-2-oxepanethione (I) with aqueous solution of 3% aqueous sulpholane. The separation of both diols was very difficult because the difference between the two components of boric acid-diols form 1H boric acids (Baf, 3). By treating the cis-diol with acetone, 5% isopropylidene-sulpholane was prepared. The preparation of hydroxy-1,4-bromomethylphosphine(VII) was described by O. Van Loohsen (Ref. 1). On heating the epoxide, 4-hydroxy-2-sulpholane (VII) can be obtained. It is difficult to isolate the epoxide IV because molecular compounds with the bromohydride VIII are formed. Thermal analysis showed that these compounds contain the two components in a ratio of 1:1 and 7:1, and the authors succeeded in isolating a molecular compound of the first type. Purification of the epoxide by crystallization is difficult, and a method based on the varying

rates of reaction of the epoxide IV and the epoxidation of VII with liquid ammonia (Ref. 2) is given. The hydroxy-sulpholane VI was also prepared in high yields by the reaction of the chlorohydride with liquid ammonia. Details of the preparation of the various compounds, their percentage composition, melting points and yields are given. There is 1 figure and there are 10 references: 3 German, 2 Bulgarian, 3 Czech, and 2 English.

ASSOCIATION Katedra organické chemie, Matematickocheská fakulta, Karlova univerzita, Praha, (Chair of Organic Chemistry, Department for Mathematics and Physics, Charles University, Prague)

CARD 3/3

"APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8

HORAK, V.

Subject: III Degradation of the bulleid line
with Dean Milt Prokes and Vachey Horak (Kan)

APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8"

"APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8

APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8"

HORAK, V.; ZAVADA, J.; PISKALA, A.

New method for preparing tetrahydro-1, 4-thiopyrones. In German. p. 97.

ACTA CHIMICA. (Magyar Tudomanyos Akademia) Budapest, Hungary. Vol. 21, no. 1,
1959

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960

Unc1

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., no. 1959, No. 9/59
AUTHOR : Prochazka, M.; Hora, V.
INST. :
TITLE : On SelfPolishes. I. HalogenSubstitutes.
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,
No 2, 609-615
ABSTRACT : See RZKhim., 1959, No 12, 734-5.

CARD:

HORAK, V.

3-Methoxy-1,4-thiaphrone and its relation to tropolone
Karelka, J., Karlova, M. Prague
Chem. Zvesti, 1960, 34, 322-324
3-Methoxy-1,4-thiaphrone was prep'd from 4-methoxy-
1,4-thiaphrone via 4-methoxy-1,4-thiaphrone and had similar
properties to 3-methoxy-tropolone. It sublimed easily ⁷ ⁴
in vacuo, was soln. in light oil to give a yellow soln., the color of
which was unaffected by NaOH, gave a reddish purple color
with FeCl₃, gave a yellowish green complex with Cu(OAc)₂
which could be extd. into CH₂Cl₂, ν 3250 (wide band), 1630
(doublet), 1542, 1410, 1338, 1300, 1280, 1165, 1034, 847
and 705 cm.⁻¹ I and CH₃N₃ in Et₂O gave 3-methoxy-1,4-
thiaphrone, m. 82°, which sublimed *in vacuo*.

Rip G. Rice

17K

HORAK, V.; ZUMAN, P.

Fission of activated carbon-nitrogen and carbon-sulfur bonds. Coll Cz
chem 26 no.1:173-175 Ja '61. (KEAI 10:9)

1. Department of Organic Chemistry, Charles University and Polaro-
graphic Institute, Czechoslovak Academy of Science.

(Carbon) (Nitrogen) (Sulfur) (Chemical bonds)

ZUMAN, P.; HORAK, V.

Fission of activated carbon-nitrogen and carbon-sulfur bonds. I.
Polarographic reduction of the single C-N-bond. Coll Cz chem 26-
no.1:176-192 Ja '61. (KEAI 10:9)

1. Polarographic Institute, Czechoslovak Academy of Science and
Department of Organic Chemistry.

(Carbon) (Nitrogen) (Sulfur) (Chemical bonds)
(Polarograph and polarography)

HORAK, V.; ZAVADA, J.

Sulfur analogues from tropane derivates. Part 2: Derivates of
8-thia-bicyclo(1,2,3)octane-3-ol epimers. Coll Cz Chem 27
no.5:1224-1228 My '62.

1. Institut fur organische Chemie, Karlsuniversitat, Prag.

HOLECEK, V.; HORAK, V.

Photooxidation of some nonidentified components of wood acetones.
Part 3: Formation of β -acetylarylic acid from 2-methylfuran.
Coll Cz Chem 27 no.11:2717-2721 N '62.

1. Institut fur Arbeitshygiene und Berufskrankheiten, Prag
und Institut fur organische Chemie, Karlsuniversitat, Prag.

HORAK, V.

"Mechanism of sulfur reactions" by W.A.Pryor. Reviewed by
V.Horak. Chem listy 56 no.11:1370-1371 N '62.

HORAK, V.

"Reaction of metallocorganic agents. Preparatory reaction in organic chemistry" by Karel Blaha. Reviewed by V. Horak. Chem Listy 56 no.12:1466-1468 D '62.

ZAHRADNÍK, R; PÁRKANYÍ, C; HORÁK, V; KOUTECKÝ, J.

Institute of Physical Chemistry, Czechoslovak
Academy of Science -- Prague; Department of
Organic Chemistry, Charles University -- Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 4, 1963, pp 776-794

"Study of the Reactivity of Sulphur Heterocycles."

4

PARKANYI, C.; HORAK, V.

Seminars "Quantum chemistry" and "Physical methods for determining the structure of substances." Chem listy 58 no.1:61-62 Ja'64.

"APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8

HORAK, V., doc., dr.

Symposium on organic sulfureous substances. Chem Listy 58
no.1:64 Ja'64.

APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8"

ZUMAN, P.; MNOUSEK, O.; HORAK, V.

Fission of activated carbon-nitrogen and carbon-sulfur bonds. Pt. 6.
Coll Cz Chem 29 no.1 1966-1967 D '64.

1. Jaroslav Heyrovsky Institute of Polarography of the Czechoslovak Academy of Sciences, and Institute of Organic Chemistry of Charles University, Prague. 2. Editorial Board Member, "Collection of Czechoslovak Chemical Communications" (for Zuman).

CAREXY, P.; KUMAN, P.; HORAK, V.

Fission of activated carbon-nitrogen and carbon-sulphur bonds.
Pt. 5. Coll Cz Chem ? no.12:3044-3056 D '64.

I. J. Heyrovsky Institute of Polarography of the Czechoslovak Academy of Sciences, and Department of Organic Chemistry of Charles University, Prague. A. Editor-in-Chief Member, "Selection of Czechoslovak Chemical Communications" (for Iwan).

HORAK, V.

CZECHOSLOVAKIA

CARSKY, P., ZUMAN, P., HORAK, V.

1. J. Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences,
Prague - (for ?); 2. Department of Organic Chemistry, Karlova University,
Prague - (for ?).

Prague, Collection of Czechoslovak Chemical Communications, No 10,
December 1965, pp 4316-4336

"Fission of activated carbon-nitrogen and carbon-sulfur bonds. Part 7:
Kinetics of ketol formation from α,β -unsaturated ketones in alkaline
media."

(For the 75th birthday of Academician J. Heyrovsky).

ZARUBA, K.; VEJBORA, O.; HORAK, V.

Experience with the examination of quantitative bacteriuria
in chronic pyelonephritis. Vnitrní lek. 11 no.9:873-877
S '65.

1. II. Vnitrní klinika lekarské fakulty Karlovy Univerzity
v Hradci Králové (prednosta prof. Dr. Vilo Jurkovic, Dr.Sc.)
a Ustav lekarské mikrobiologie lekarské fakulty Karlovy Uni-
versity v Hradci Králové (prednosta Dr. O. Vejbora).

JANECEK, M.; HORN, V.; FEIT, J.

Biology of bone homografts. Acta chir. orthop. traum. Cech.
32 no.5:386-391 O '65.

1. Ortopedicka klinika (prednosta prof. dr. M. Janecek) a
I. patologickoanatomicky ustav (prednosta prof. dr. J. Svejda,
DrSc.), lekarske fakulty University J.E. Purkyne v Brne.

HURAK, V.

CZECHOSLOVAKIA

GOSTAKOVA, I.; HANU, P.; HURAK, V.

1. J. Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences
(for Gostakova); 2. Institute of Organic Chemistry, Karlsruhe Univ., FRG
(for Hanu)

Prague, Collection of Czechoslovak Chemical Communications, No 3, Feb 1966,
pp 571-574

"Fission of activated carbon-nitrogen and carbon-sulfur bonds. Part 8:
Elimination of β -piperidinoethyl phenyl sulfone methiodide and reaction
of phenyl vinyl sulfone with hydronium ions."

CZECHOSLOVAKIA

PARKANYI, C.; HORAK, V.; PECKA, J.; ZAHRAVINIK, R.

1. Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague;
2. Dept. of Organic Chemistry, Karlova Univ., Prague (for ?)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb 1966,
pp 835-851

"Physical properties and chemical reactivity of alternant hydrocarbons
and related compounds. Part 10: An experimental and theoretical study of
benzol derivatives of benzenoid hydrocarbons and some oxygen- and sulfur-
containing heterocyclic analogues." (Presented at the Symposium on the
Chemistry of Organic Sulfur Compounds, Liblice near Prague, June 15-17,
1964, and at Chemiedoxententagung, Berlin, September 2-5, 1964.)

HORAK, V.

CZECHOSLOVAKIA

BESTAKOVA, I; HORAK, V; ZUMAN, P.

1. J. Heyrovsky Institute of Polarography, Czechoslovak Academy of Sciences (for 1); 2. Department of Organic Chemistry, Karlova University, Prague (for 2)

Prague, Collection of Czechoslovak Chemical Communications,
No 10, October 1966, pp 3889-3902

Fission of activated carbon/nitrogen and carbon/sulfur bonds. Part 9: Polarographic study of addition of primary amines to phenyl vinyl ketone.

HORAK, Vaclav, inz.

High temperature chloridizing roasting of pyrite cinders containing nonferrous metals. Rudy 10 no.7; Suppl.: Prace vyzkust no.6:38-41 J1 '62.

1. Ustav pro vyzkum rud, Praha.

S/277/63/000/001/008/017
A052/A126

AUTHORS: Tlustá, Dagmar, Horák, Václav

TITLE: Use of boron-containing steel in automobile industry

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, 48. Mashinostroitel'nyye materialy, konstruktsii i raschet detaley mashin, no. 1, 1963, 7, abstract 1.48.54 ("Automobil" (CSSR), v. 6, no. 5, 1962, 144 - 149, Czech; summaries in Russian, German and English)

TEXT: The economic effect of using boron-containing steel in the automobile industry instead of steels alloyed with more deficient additives is analyzed. Special attention is paid to the annealability of boron-containing steel.

[Abstracter's note: Complete translation]

Card 1/1

HORAK, Vaclav; KYZLINK, Vladimir

Permanent magnets made by pressing the mixture of metal powder with synthetic resin. Stroj vyr 10 no.12:603-605 '62.

1. Tesla Liberec.

"APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8

HORAK, Vl., inz. (Praha)

Exacteness of time measuring. Jemna mech opt 6 no.9:290-293 S '61.

APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8"

"APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8

HORAK, Vl., inz. (Nove Mesto nad Metují)

Run exactness of mechanical watches. Jomma mech opt 6
no.5:145-149 My '61.

APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8"

HORAK, Vladimír, inz.

Automation of glass batch dressing. Sklar a keramik 12 no.1:
10-11 Ja '62.

1. Československá akademie věd, Praha

Method for Solving the Algebraic Equation With Pairs of Complex Roots by
Graeffe's Procedure. (Numerical Computations) 2

6785:

Horák, Vladimír. Zu einer Lösungsmethode der algebraischen Gleichungen mit vielen komplexen Wurzelpaaren nach dem Graefeschen Verfahren. Casopis Pěst. Mat. 82 (1957), 440-453. (Czech. Russian and German summaries)

Der Verfasser untersucht die folgende bekannte Methode der Lösung einer reellen algebraischen Gleichung $f(x)=0$, 2n-ten Grades mit lauter komplexen einfachen Wurzelpaaren: Man findet (z.B. mit Hilfe des Graeffeschen Verfahrens) die absoluten Beträge r_1, r_2, \dots, r_n ($r_1 \leq r_2 \leq \dots \leq r_n$) bzw. $\rho_1, \rho_2, \dots, \rho_n$ (jetzt schon $\rho_1 < \rho_2 < \dots < \rho_n$) der Wurzelpaare der Gleichungen $f(x)=0$ bzw. $f(x+u)=0$, wo $0 < u < U = \min(r_{i+1} - r_i)$ für $i=1, \dots, n-1$, $r_{i+1} \neq r_i$. Dann sind die Wurzeln von $f(x)=0$ gleich den Wurzeln von n Gleichungen ($i=1, \dots, n$)

$$(1) \quad x^2 + u^{-1}(\rho_i^2 - r_i^2 - u^2)x + r_i^2 = 0.$$

Es werden Regeln angegeben, die zur Bestimmung der Anzahl von richtigen Ziffern der Koeffizienten in (1) im Zehnersystem dienen, wenn die Anzahl der richtigen Ziffern von r_i und ρ_i bekannt ist. Die Anwendung dieser Regeln (bei vorgeschriebener Genauigkeit) erfordert, die absoluten Beträge der Wurzeln r_i zuerst mit kleinerer Genauigkeit zu bestimmen. M. Fiedler (Prague)

1-FW

L 17247-63

SPW(j)/B1S--AFFTC/ASD--PC-4--RM/WW

1/0009/53/CC/005/0325/0327

ACCESSION NO: 17247-63

AUTHOR: Kalin, Jaroslav, Herak, Vlastimil

TITLE: Epoxy resins prepared by phase boundary reaction.

SOURCE: Chemicky prumysl, no. 6, 1963, 325-327

TOPIC TAGS: condensation, phase boundary, epichlorhydrin solvent, infrared spectrum, epichlorhydrin

ABSTRACT: Long reaction times in the manufacture of epoxy resins prepared by the usual methods are an important obstacle to continuous production. The authors studied the possibility of shortening the reaction time by using "condensation at the phase boundary," and found this method to be simple and more rapid than the usual ones. Resins with both low and medium molecular weight can be prepared in this way. The content of epoxy groups is mostly influenced by the initial ratio of monomers, their concentration in the phase, and the kind of solvent for epichlorhydrin. It is not substantially affected by the reaction temperature or rate of mixing. The fractions obtained from the

Card 1/2

L 17247-63
ACCESSION NR: AP3002541

samples did not differ essentially from similar laboratory samples prepared by the ordinary method. The infrared spectra were compared with the spectrum published for a typical liquid resin of the same type and found not to differ pronouncedly. Orig. art. has: 5 graphs and 4 tables.

ASSOCIATION: Vysoka skola chemickotechnologicka, Prague (Chemicotechnological College)

SUBMITTED: Pracec DATE ACQ: 15Jul63 INCL: 00
SUB CODE: CH, MA NC REF Sov: 002 OTHER: 006

Card 2/4

HORAK, Vladimir

Linear tangential complexes of straight-line congruences.
Chekhosl mat zhurnal 13 no.2:166-188 Je '63.

1. Prirodovedecka fakulta university J.E. Purkyne, Brno,
Kotlarska 2.

HORAK, Vladimir, inz.

Determining sugar in plants. Rostlin výroba 9 no.2:209-212 F '63.

1. Ustřední kontrolní a zkusební ústav zemědělský, Praha.

VLADAR, Jaroslav, doc. inz. CSc.; HORAK, Vladimir, inz.

Hardening of water gauge glass, resistance furnaces. Ener-

getika Cz 14 no.6:283-287 Je *64

1. Czech Higher School of Technology, Prague (for Vladar).
2. Research Institute of Heavy Machine Industry (for Horak).

BENO, Antonin; HORAK, Vladimir

Bacteriological findings in operations performed for chronic middle ear deafness. Sborn. ved. prac. lek. fak. Karlov. univ. (Hrad. Kral.) 4 no.1:53-60 '61.

1. Otolaryngologicka klinika; prednosta prof. Dr. Sc. MUDr. J. Hybasek
Ustredni mikrobiologicka laborator; vedouci prom. lek. V. Lonska.

(EAR MIDDLE surgery) (OTITIS MEDIA microbiol)

HORAK Zdenek (microbiologist)

Country
Category

Abs. Jourr.: Czechoslovakia
Category: Microbiology, Mycobacteriology, Microbes Pathogenic for Man and Animals

Institut.: NaF Zhur-Biol., No 2/1, 1958, No 1039/20

Title: Galliovy, J.; Horak, Z.; Drodova, M.

Author
Institut.

Orig. Pub.: Cultivation of BCG and M-P Strains on Dubos' Nutritive
Medium with a BCG Culture Filtrate as on Aloumin

Abstract:

Substitute: Rozhl. tuberk. a nemocech pilonich., 1957, 17, No 4,
260-265

Using the usual method of preparing BCG vaccines, a culture from Sauton's medium is ground up with small metal balls and, therefore, contains a certain number of dead and injured bacteria and fragments of them. Dubos suggested growing vaccine strains on a liquid medium without preliminary grinding. In this way, the possibility is obtained of the culture which then collects at the bottom of the flask. In this vaccine without preliminary grinding. Because the commercial Tween contains a certain quantity of free fatty acids which are toxic to mycobacteria, Dubos adds bovine serum albumin to the culture medium; this

APPROVED FOR RELEASE: 09/21/2001

CIA-RDP86-00513R000618120014-8"

Ca

Card:

7-71

P-72

Country :
Category :
Abs. Jour : Ref Zhur-Biol., No 23, 1958, No103920
Author :
Institut. :
Title :

Orig. Pub. :
Abstract : neutralizes the toxic effect of the Tween and, in addition, stimulates the growth of the mycobacteria. Vaccine prepared according to the Dubos method gives a higher percentage of positive and stronger reactions than the usual vaccine on intracutaneous testing, which is apparently explained by the higher content of live bacteria in it. The main objection to the use of vaccine prepared according to the Dubos modification is the impossibility of reliably sterilizing the serum albumin for purposes of preventing the possibility of transmission of virus infections. Therefore, the authors replaced the human albumin in Dubos' medium

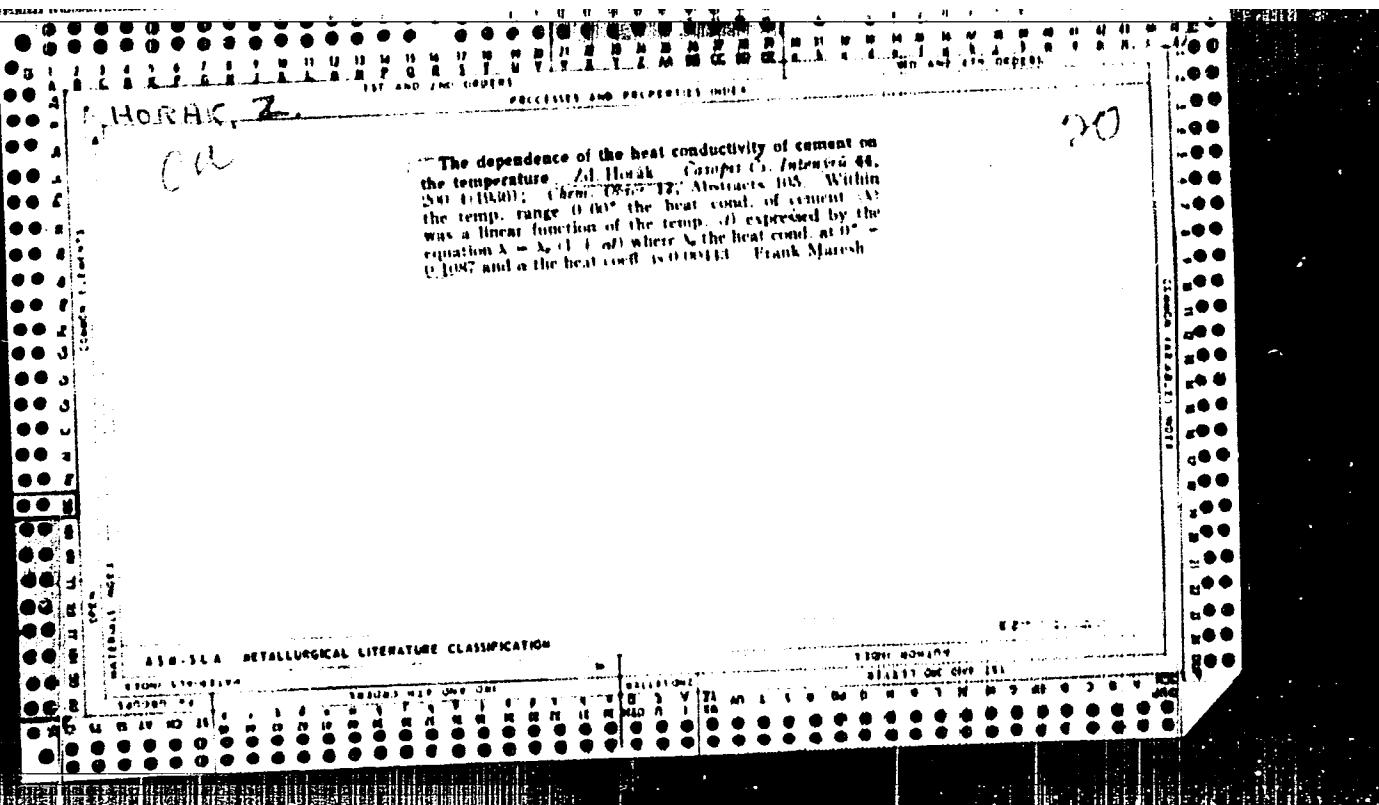
Card: 2/4

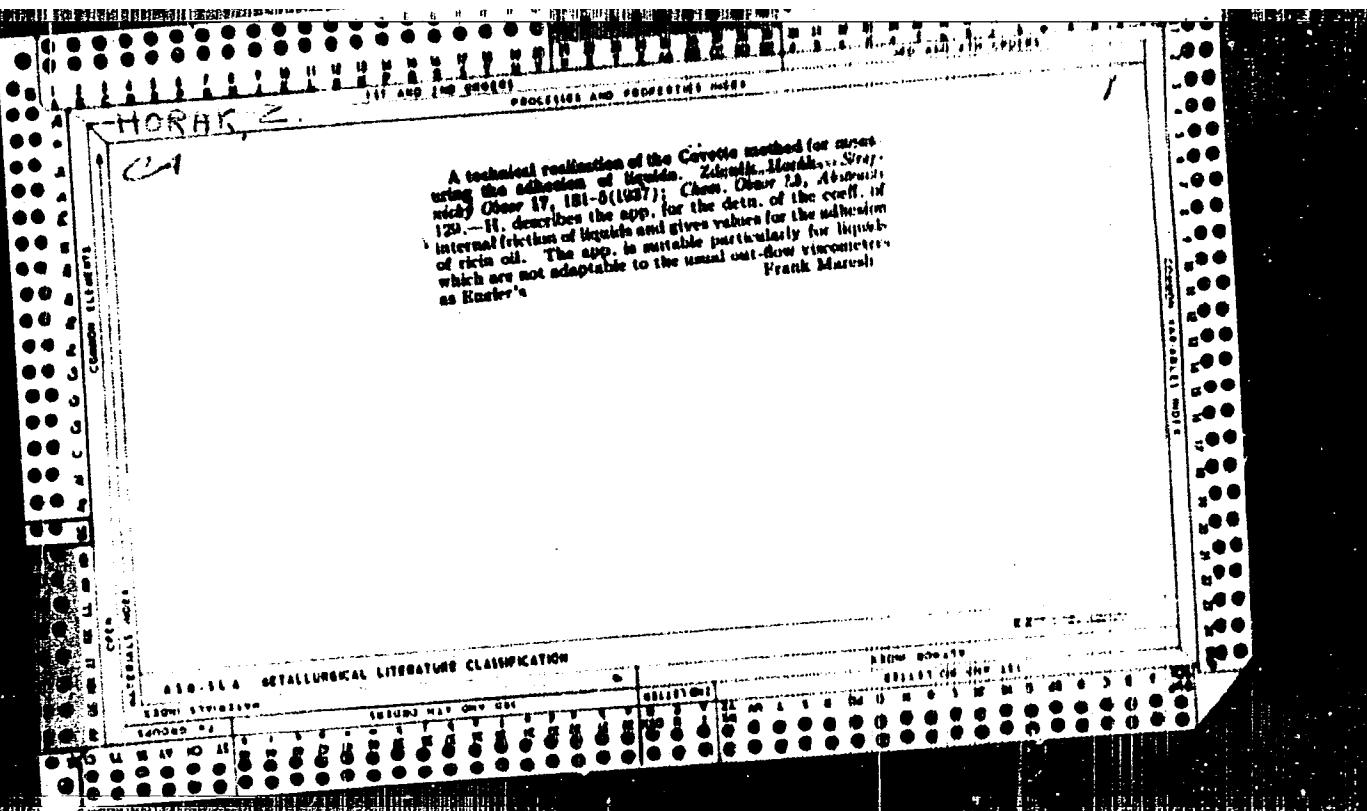
-71

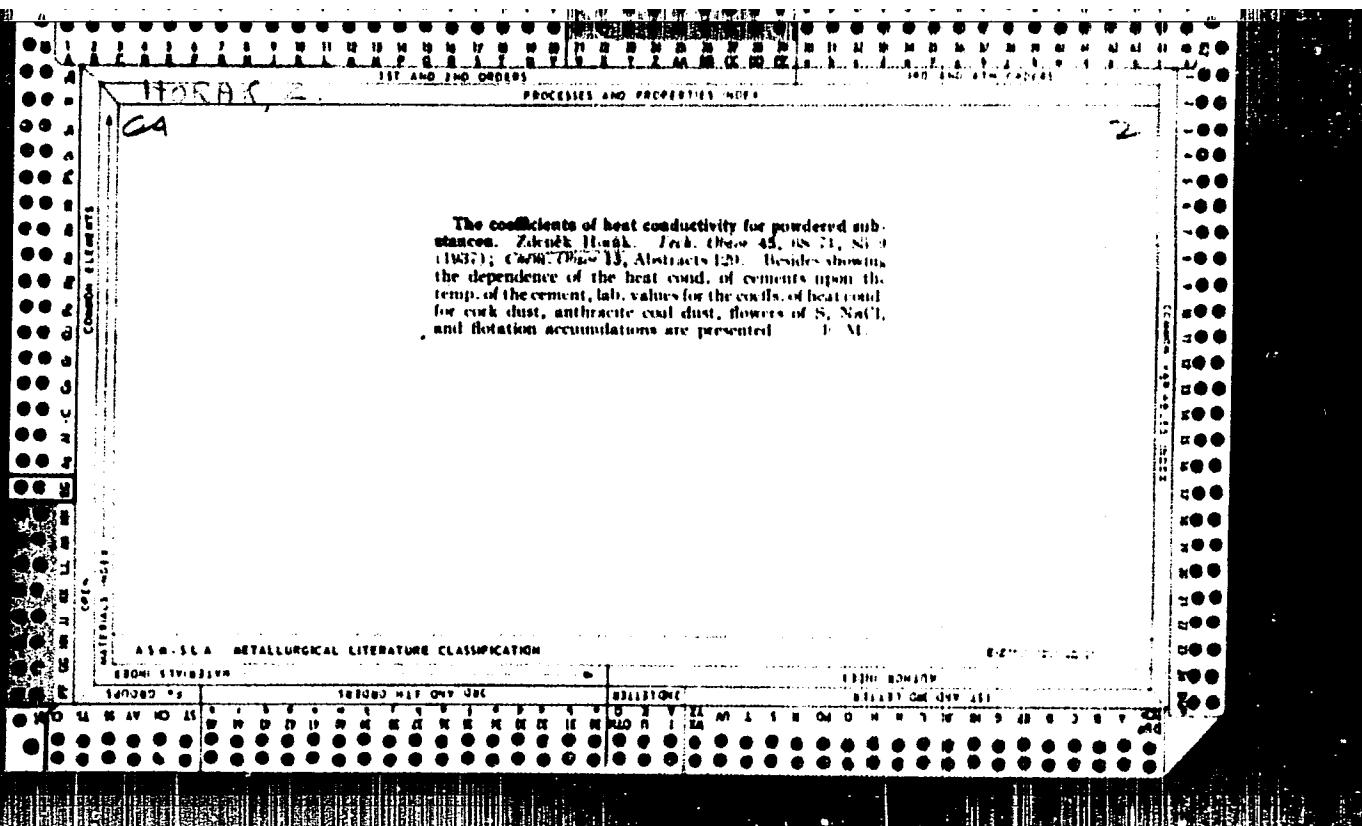
Country :	
Category :	F
Abs. Jour :	Ref. Nutr-Biol., No 25, 1958, No 103920
Author :	
Institut. :	
Title :	
Orig. Pub. :	
Abstract (Cont.)	: with filtrates from an 8-week subsurface BCG culture or M-P strain in a synthetic medium consisting of K ₂ HPO ₄ 1.5 grams, MgSO ₄ 0.1 gram, asparagine 1.5 grams, glycerin 5.0 grams, distilled water 1000 cc and 10% Tween, or a 3-week culture on Sauton's medium filtered through a Birkhaug apparatus under pressure. Both filtrates are sterilized by passage through a Seitz filter. The filtrates obtained possess detoxifying properties similar to albumin but are almost completely devoid of growth factors, for which reason the BCG and M-P strains, which generally grow well on Dubos' medium with the culture filtrates, cannot withstand a large number of transplantations using this medium.
Card:	3/4

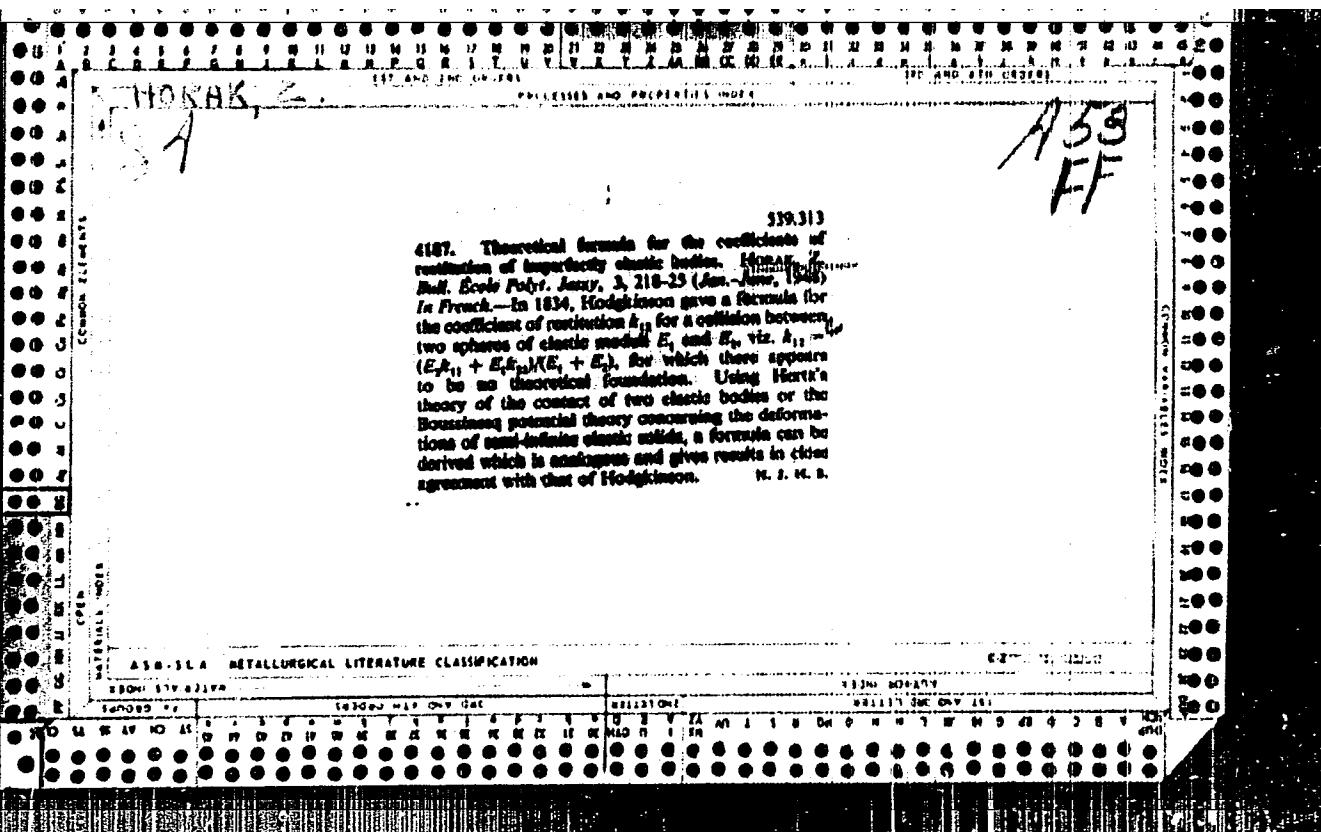
Country :	
Category :	
Abs. Jour :	Ref Zhur-Biol., No 25, 1958, No 103620
Author :	
Institut. :	
Title :	
Orig. Pub. :	
Abstract (Cont.)	:Therefore, the authors suggest maintaining the principal strains on other media and plating them out on modified Dubos' medium for the purpose of preparing the vaccine. --M.A. Gruzman.
Card:	4/4

F-72









HORAK, ZDENEK

Horak, Zdenek Pocetni zpracovani fysikalnich mereni. (Vyd. 1.) Praha, Statni pedagog-icke nakl., 1953, 117 p. (Ucebni texty vysokych skol) (Mathematical treatment of physical measurements.)

SO: Monthly List of East European Accessions, L C, Vol. 3, No. 1, Jan. 1954, Uncl.

HORAK, ZDENEK

Category : CZECHOSLOVAKIA/General Problems - Method and Technique of
Investigation

A-4

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 135

Author : Horak, Zdenek

Title : A Generalization of the Normal Error Law

Orig Pub: Casop. pestov. fys., 1953, 3, No 5, 348-365

Abstract : See Abstract No 134

Card : 1/1

HORAK, ZDENEK

Category : CZECHOSLOVAKIA/General Problems - Method and Technique of
Investigation

A-4

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 134

Author : Horak, Zdenek
Inst : Technical University, Prague, Czechoslovakia
Title : A Generalization of the Normal Error Law

Orig Pub : Chekhosl. fiz., 1954, 4, No 2, 187-203

Abstract : Starting with a statistical investigation of errors in physical measurements, the author reaches the conclusion that this distribution does not satisfy the Laplace-Gauss distribution law with sufficient accuracy. He therefore replaces the Laplace-Gauss distribution function by the function $\gamma(w) = a/(a^2 + w^2)$, which corresponds to Brillouin's general quantum statistics. From a mathematical investigation of the properties of the new distribution function the author reaches the conclusion that at $b \neq 0$ it is impossible to determine the probable error of the results by ordinary means either from the mean-squared error or from the average errors. Only if these two errors are determined it becomes possible to compute the probable error, which depends on their ratio, which in turn is determined by the constant b. The author gives a detailed description of a method developed for determining the constants a, b, and c and applies this method to 14 series

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Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 134

comprising a total of 4,155 different measurements. He reaches the conclusion that the actual measurements differ from classical theories in both possible directions. The greatest deviations are exhibited by the series with $b = 0.71$ from among the series with $b > 0$ ("super-normal distribution") and the series with $b = -5$ from among those with $b < 0$ ("subnormal distribution"). In the former case the probable error is 5% of the average error, and in the latter it amounts to 7% of the average error. This work does not explain the theoretical connection between quantum statistics and the theory of errors. The author will treat this problem in the future. The results of this work may be of practical significance in the determination of errors of precise measurements.

Card : 2/2

HORAK, Z.

New technical method for measuring the dynamic elasticity of artificial
materials and ball bearings. p. 103.
STROJNICKY SBORNIK, Prague, No. 8, 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
June 1956, Uncl.

HORAK, Z.

Josef Reznicek's Jednotky v energetice (Units in Energetics;) a book review. P. 123
CESKOSLOVENSKY CASOPIS PRO FYSIKU Vol. 5, No. 1, Jan. 1955

SO: Monthly East European Accession (EEAL), LC, Vol. 4, No. 9, Sept. 1955 Uncl.

Category : CZECHOSLOVAKIA/General Problems - Method and Technique of
Investigation

A-4

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 137

Author : Horak, Zdenek
Title : Reply to J. Pachner's Discussion

Orig Pub : Ceskosl. casop. fys., 1955, 5, No 4, 483-484

Abstract : See Abstract No 136

Card : 1/1

~~HORAK, Z.~~

B-8

CZECHOSLOVAKIA/Physical Chemistry - Thermodynamics, Thermo-
chemistry, Equilibrium, Physicochemical Analysis,
Phase Transition.

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24121

Author : Krupka Frantisek, Horak Zdenek

Inst : -
Title : Determination of Specific Heat of a Liquid in an Electric
Calorimeter from Temperature Change with Time.

Orig Pub : Ceskosl. casop. fys., 1956, 6, No 5, 536-541

Abstract : A method has been worked out for calorimetric determina-
tion of specific heat of liquids. The curve of heating
up of the calorimeter, containing the liquid being stir-
red, is represented by a parabola and when the constants
of this parabola have been determined it is possible to
calculate the specific heat of the liquid. In so doing
it is assumed that Newton's law holds, that temperature

Card 1/2

HORAK, Z.

Boltzmann's statistics and the normal law of multitude; in honor of Academician Dionyz Ilkovic at fifty. p. 67. (Matematicko-Fyzikalny Casopis, Vol. 7, No. 1, 1957, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

HORAK, Z.

Viktor Trkal's Uvod do theoreticke fysiky, dil I: Mechanika hmotnych bodu a tuheho telesa (Introduction to Theoretical Physics, Vol. 1. Mechanics of Material Points and Rigid Bodies); a book review.

P. 606 (CESKOSLOVENSKY CASOPIS PRO FYSIKU) Vol. 7, no. 5, 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

HORAK, Z.

On the threshold of the atomic age, p. 505.

Vol. 44, no. 10, Oct. 1955
ELEKTROTECHNICKÝ ČBZOR
Praha, Czechoslovakia

Source: East European Accession List, Library of Congress
Vol. 5, No. 3, August 1956

ZDENEK, HORAH

CZECHOSLOVAKIA/Nuclear Physics

C-2

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 10983

Author : Horah Zdeneh

Inst : Not given

Title : Modern Synchrotrons

Orig Pub : Elektrotechn. obzor, 1956, 45, No 10, 496-504

Abstract : No abstract.

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